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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,660	01/12/2004	Mark L. Enders	14299	9306

7590

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EXAMINER

GOODEN JR, BARRY J

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/755,660	ENDERS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Barry J. Gooden Jr.	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/12/04 &amp; 5/12/05</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 14, 15, 29, 30, and 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The term "about" in claims 14, 15, 29, 30 and 31 is a relative term which renders the claim indefinite. The term "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Examiner suggests removing "about" from the claim language. Examiner also notes that the Applicant has disclosed the prior art as inflating airbags within the range of 4 to 6 psi.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takimoto et al., EP 1 300 299 A1, in view of Mihm et al., US Patent 5,306,043.

In regards to claims 1-30 Takimoto et al. show all of the claimed elements including, a knee airbag assembly comprising:

an inflatable fabric cushion (66) having a first side (68) and a second side (67), the first (68) and second (67) sides being opposite each other;

a first tether (29) located on an internal side of the inflatable cushion (66), the first internal tether (29) attached to and interconnecting the first side (68) and the second side (67);

further comprising a tether (69) located on an external side of the inflatable cushion, the external tether (69) being attached to the fabric (67) of the second side (67) of the inflatable cushion (66);

wherein the external tether (69) has a first end and a second end, both first and second ends attached to the second side of the inflatable cushion, such that a portion of the inflatable cushion is located between attachment locations of the first and second ends (See Figure 16);

wherein the external tether (69) has a length shorter than a length of the portion of the inflatable cushion (66) located between the attachment location of the first and second ends of the external tether (69);

wherein the first internal tether (29) has a width shorter than a distance that the first side (68) of the inflatable cushion can be separated from the second side (67) (See Figure 16);

further comprising an inflator (21) for inflating the inflatable cushion (66).

Takimoto et al. discloses all of the claimed elements excluding loops being formed in the cushion, the cushion being formed of a continuous sheet and the range of internal pressures the inflator inflates the inflatable cushion to.

Mihm et al. teaches of an inflatable cushion (12) having a loop (84) being formed in the fabric of the first side; and

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a tether (94) located on an internal side of the inflatable cushion (12), the internal tether (94) being attached to the fabric of the side of the inflatable cushion (12) at the loop (84); and, wherein the inflatable cushion is formed from one continuous sheet of fabric material (Column 8, Lines 62-66).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the inflatable cushion of Takimoto et al. in view of the teachings of Mihm et al. to include a internal loops at the portions where the internal tethers attach to the sides of the inflatable cushion so as to provide an economical use of the fabric and to form a very efficient and simple way of forming such an airbag (Column 8, Line 62-Column 9, Line 2).

In regards to claims 1, 10, 11, 16, 24, 25, 31, 32, and 33, Takimoto et al. in view of Mihm et al. teaches the claimed invention except for multiple loops for each end where a tether attaches to an inflatable cushion. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a tether attachment point as taught by Mihm et al. for each tether attachment point required by the structure of Takimoto et al. so as to provide a secure attachment location for each tether attachment point, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

In regards to claims 8, 9, 22, and 23, Takimoto et al. in view of Mihm et al. teaches the claimed invention except for the loops being flipped towards the outside and the tethers being attached to the inside rather than the outside of the loop. It would have been obvious to one having ordinary skill in the art at the time the invention was made to flip the loops towards the outside so as to provide for ease of stitching, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art.

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In regards to claims 14, 15, 29, 30, and 31, Takimoto et al. in view of Mihm et al. teaches the claimed invention except for the inflator inflating the inflatable cushion to within the range of 6 psi and 14 psi or 10 psi and 14 psi. It would have been obvious to one having ordinary skill in the art at the time the invention was made to inflate the inflatable cushion to within the ranges above so as to provide an adequate cushioning action, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In addition the Applicant has disclosed the prior art as inflating airbags within the range of 4 to 6 psi.

In regards to claims 34-37, Takimoto et al. in view of Mihm et al. teaches a structure meeting the method limitations of the claims.

#### **Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry J. Gooden Jr. whose telephone number is (571) 272-5135. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJG

Barry J Gooden Jr.  
Examiner  
Art Unit 3616

*Barry J Gooden Jr.* 3/28/06

*Eric Culbreth*  
ERIC CULBRETH  
PRIMARY EXAMINER